ABSTRACT

A modeling system permits developers of applications for distributed computer system, such as those used in server data centers or Internet data centers (IDCs), to architect their hardware and software in an abstract manner. The modeling system defines a set of components that represent abstract functional operations of the application that will eventually be physically implemented by one or more computers and one or more software programs executing on the computers. Associated with the model components is a schema that dictates how the functional operations are to be specified. From the model components, the developers can create logical, scale-independent models of the applications that may be implemented by the distributed computer system. The application is scale-independent in that the application is invariant in respect to the number of computers and software programs that my eventually be used to implement it. The application may subsequently be converted to a physical blueprint that specifies the number and type of hardware/software resources and the physical layout of the distributed computer system.